

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL IAN WILLER,  
TAKAYASU MUTO, and DONALD ROBERT CADWELL

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Appeal 2007-0869  
Application 10/648,587  
Technology Center 3600

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Decided: April 24, 2007

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Before MURRIEL E. CRAWFORD, STUART S. LEVY,  
and ROBERT E. NAPPI *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 6(b) of the Final Rejection of claims 8 through 16, 18 through 22 and 26 through 28. For the reasons stated *infra* we will not sustain the Examiner's rejection of these claims.

## INVENTION

The invention is directed to a wireless GPS device for vehicles. The device includes both a GPS unit and a Bluetooth unit. The device contains only one reference oscillator which is used by both the GPS unit and the Bluetooth unit. See pages 3 and 4 of Appellants' Specification. Claim 8 representative of the invention and reproduced below:

8. A module, comprising:
  - a module housing;
  - a GPS receiver in the module housing and receiving position information;
  - a wireless transceiver in the module housing and communicating with the GPS receiver for transmitting information received from the GPS receiver; and
  - one and only one reference oscillator in the housing providing mixing signals to the GPS receiver and the wireless transceiver, the GPS receiver and wireless transceiver not sharing any components other than the reference oscillator.

## REFERENCES

The references relied upon by the Examiner are:

McCarthy	US 6,477,464 B2	Nov. 5, 2002
Peterzell	US 2003/0040292 A1	Feb. 27, 2003
Schofield	US 6,690,268 B2	Feb. 10, 2004 (filed Jan. 10, 2002)

"BlueCore™ 01b, *Single Chip Bluetooth Device*, Product Data Sheet for BC01b-USB, Production Information, Jul. 2001, pp. 1-15.

"BlueCore™ 2-ROM, *Single Chip Bluetooth® System*, Production Information Data Sheet for BC213143A, Cambridge Silicone Radio, Aug. 2005.

### REJECTION AT ISSUE

Claims 8 through 16, 18 through 22, and 26 through 28 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over McCarthy in view of Peterzell. The Examiner's rejection is set forth on pages 3 and 4 of the Answer. Throughout the opinion we make reference to the Brief and Reply Brief (received January 19, 2006, and April 10, 2006 respectively), and the Answer (mailed August 14, 2006) for the respective details thereof.

### ISSUES

Appellants contend that the Examiner's rejection of independent claims 8, 16, and 26 under 35 U.S.C. § 103(a) is in error. Appellants assert that Peterzell fails to teach a circuit that processes two different signal types using a common oscillator and only a common oscillator. (Br. 5)

The Examiner asserts that the rejection is proper. The Examiner, on page 3 of the Answer, states that the Appellants are confusing the local oscillators with and reference oscillator. The Examiner finds that the reference oscillator of Peterzell is common to the local oscillators. (Answer 5).

Thus, the issue before us is whether Peterzell teaches or suggests a device where a GPS receiver and a wireless transceiver that share a reference oscillator.

## FINDINGS OF FACT

McCarthy teaches a device for an automobile where there is a GPS device and a wireless transceiver in the same housing. See figure 2 and column 3, lines 44 through 47. McCarthy does not discuss how the oscillators in the systems are used.

Peterzell teaches a system for generating local oscillator signals. These signals are used in wireless communication devices. See abstract and para. 0005. The wireless devices may have several bands and modes of operation. See para. 0027. These modes of operation include GPS which requires a GPS receiver and transceivers for phone communication. See para. 0028. The GPS signal path, shown in figure 5 and comprising units 390 and 395, is separate from the phone communication paths shown flowing from LNA item 320. See para's 0058 and 0066. Peterzell depicts several embodiments for local oscillators, which include inputs from a reference oscillator, see for instance input 405 in fig. 6 and oscillator item, 606 in fig. 8. With respect to figure 6, Peterzell states the phase locked loop "410 receives a signal at a reference frequency 405 to create discrete channel spacings within each operating band." Para. 0069. The local oscillator of figure 6 can be used as oscillator item 350 in the phone communication path receiver of figure 5. However, we note that Peterzell does not discuss use of the local oscillator in the separate GPS signal path, nor does Peterzell teach that the same reference oscillator should be used for the GPS unit as is used in the phone units.

BlueCore™ 01b, *Single Chip Bluetooth Device*, Product Data Sheet for BC01b-USB and BlueCore™ 2-ROM, *Single Chip Bluetooth® System*,

Product Information Data Sheet for BC21313A both describe single chip Bluetooth devices. These data sheets identify that the Bluetooth is provided input from an external oscillator. We find no disclosure in these documents, nor has the Examiner identified any disclosure, of the same external oscillator being used by other systems.

We find that it is common knowledge that computer systems often make use of a master system clock (an oscillator) which provides input to all timing circuits. The system clock in such systems is typically required so that events and data transfer within the computer system can be coordinated.

#### ANALYSIS

Independent claim 1 recites “one and only one reference oscillator in the housing providing mixing signals to the GPS receiver and the wireless transceiver, the GPS receiver and wireless transceiver not sharing any components other than the reference oscillator.” Independent claim 26 recites the limitation “wherein the wireless transceiver means and the GPS receiver share a common oscillator and only the common oscillator.” Thus, the scope of independent claims 1, and 26 require a GPS unit share an oscillator with a transceiver and that the oscillator is the only element shared by the GPS unit and transceiver. The Examiner relies upon Peterzell for this teaching. As discussed above we find that Peterzell teaches a device which contains a GPS unit and a transceiver that have separate signal paths. However, we find no teaching or suggestion in Peterzell that the two units should both receive input from the same reference oscillator. Similarly we find no teaching or suggestion in McCarthy of sharing an oscillator as

claimed. We recognize that the Bluetooth data sheets provided by the Examiner teach circuits that make use of a reference oscillator external from the chip. These data sheets do not teach that the same reference oscillator is used for multiple circuits. While it is common knowledge that computers systems typically have one oscillator for the system, we do not find evidence of record that the problem solved by a single system clock in a computer system applies to a device with a GPS unit and transceiver unit as claimed. Accordingly, we do not find that the combination of McCarthy and Peterzell teaches or suggests the limitations of independent claims 1 and 26.

Independent claim 16 recites “one and only one reference oscillator in the housing providing mixing signal to the GPS receiver and the wireless transceiver, the receiver and transceiver not sharing a mixer.” Thus, claim 16 is of different scope than independent claims 1 and 26. Nonetheless claim 16 also recites that one oscillator provides input to a GPS unit and a transceiver. As discussed above we do not find that the combination of McCarthy and Peterzell teach or suggest this feature.

## CONCLUSION

We consider the Examiner’s rejection of 8 through 16, 18 through 22, and 26 through 28 under 35 U.S.C. § 103(a) to be in error as we do not find that the combination of McCarthy in view of Peterzell teach or suggest the limitations in independent claims 8, 16, and 26. Accordingly, we will not

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sustain the Examiner's rejection of claims 8 through 16, 18 through 22, and 26 through 28 under 35 U.S.C. § 103 (a).

ORDER

For the forgoing reasons, we will not sustain the Examiner's rejections, under 35 U.S.C. § 103. The decision of the Examiner is reversed.

REVERSED

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